

# Work Order ID 84388

**\*84388\***

Page 1

May-11-12 8:16:39 AM

Item ID: D3639-2

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Doubler

Start Date: 11/05/2012 Start Qty: 10.00

**\*10\***

Cust Item ID:

Required Date: 25/05/2012 Req'd Qty: 10.00

**\*10\***

Customer:

Reference:

Approvals:

Process Plan: MLJ

Date: 12/05/11

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D3639

Rev A

100

0.00

**\*100\***

FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3639

~~2024 .085~~

Dwg Rev: A

Prog Rev: A

2024 .050

2-Deburr if necessary

10 0 Jm 12-6-19

110

QC2- Inspect parts off machine FAI/FAIB

0.00

**\*110\***

QC

Memo

0.00

Quality Control

10 0 Jm 12-6-19

120

QC8- Inspect parts - second check

0.00

**\*120\***

QC

Memo

0.00

Quality Control

5/26/19

(XU)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 84388

**\*84388\***

Page 2

May-11-12 8:16:39 AM

Item ID: D3639-2

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Doubler

Start Date: 11/05/2012 Start Qty: 10.00

**\*10\***

Cust Item ID:

Required Date: 25/05/2012 Req'd Qty: 10.00

**\*10\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

140

**\*140\***

NC BRAKE

0.00

Brake NC

Memo

0.00

Brake NC

Form as per Dwg D3639

150

**\*150\***

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

Quality Control

160

**\*160\***

Chemical Conversion Coat per QSI005 4.1

0.00

HandFinish

Memo

0.00

Hand Finishing

SB  
12/06/20

8.7/06/20

(40)

10 7/6/12-6-21

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

Work Order ID 84388

\*84388\*

Page 3

May-11-12 8:16:39 AM

Item ID: D3639-2 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Doubler  
 Start Date: 11/05/2012 Start Qty: 10.00 \*10\* Cust Item ID:  
 Required Date: 25/05/2012 Req'd Qty: 10.00 \*10\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	QC3- Inspect Part Finish	0.00							
*170*									
QC	Memo	0.00							
Quality Control									
180	Identify as per dwg & Stock Location: <u>ST 244</u>	0.00							
*180*									
Packaging	Memo	0.00							
Packaging									
190	QC21- Final Inspection - Work Order Release	0.00							
*190*									
QC	Memo	0.00							
Quality Control									

14/5/22 (10)

10x 80 12-6-22

12/6/25

MLJ 12/06/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

May-11-12 8:16:43 AM

Page 1

Work Order ID: 84388

**\*84388\***

Parent Item: D3639-2

**\*D3639-2\***

Parent Item Name: Doubler

Start Date: 11/05/2012

Required Date: 25/05/2012

Start Qty: 10.00

Required Qty: 10.00

**Comments:**

IPP Rev:A New Issue 07-07-20 JLM  
remove c'sink DD 10.04.13 verified by:EC

Verified By:EC IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.050		Purchased	No			100	sf	118.2000	0.239	2.515789			

**\*M2024T3S 050\***

2024-T3 .050 sheet

\*\*

Jm 12-6-19

Location

Loc Qty

Loc Code

MAT022

118.2

117684

23.9

121216

94.3

~~119117~~

121216

119117

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 89388
<b>Description:</b> Doubler		<b>Part Number:</b> D3639-2
<b>Inspection Dwg:</b> D3639	<b>Rev:</b> A	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.625	+0.008/-0.001	0.626"	✓		✓	mmol
Ø0.191	+0.005/-0.001	0.193"	✓		✓	
Ø0.098	+0.004/-0.001	0.099"	✓		✓	
0.69	+/-0.030	0.688"	✓		✓	
1.59	+/-0.030	1.588"	✓		✓	
2.49	+/-0.030	2.490"	✓		✓	
3.39	+/-0.030	3.392"	✓		✓	
3.990	+/-0.010	3.991"	✓		✓	
4.990	+/-0.010	5.0491"	✓		✓	
5.19	+/-0.030	5.192"	✓		✓	
6.99	+/-0.030	6.993"	✓		✓	
8.64	+/-0.030	8.643"	✓		✓	
0.45	+/-0.030	0.452"	✓		✓	
0.710	+/-0.010	0.712"	✓		✓	
2.000	+/-0.010	2.002"	✓		✓	
2.75	+/-0.030	2.750"	✓		✓	
3.55	+/-0.030	3.553"	✓		✓	
4.00	+/-0.030	4.001"	✓		✓	
2.000	+/-0.010	1.998"	✓		✓	
2.590	+/-0.010	2.589"	✓		✓	

<b>Measured by:</b> Jm	<b>Audited by:</b> S	<b>Prototype Approval:</b> N/A
<b>Date:</b> 12-6-19	<b>Date:</b> 17/6/19	<b>Date:</b> N/A

Rev	Date	Change	Revised by	Approved
A	07.10.19	New Issue	KJ/EC/DD	AS

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

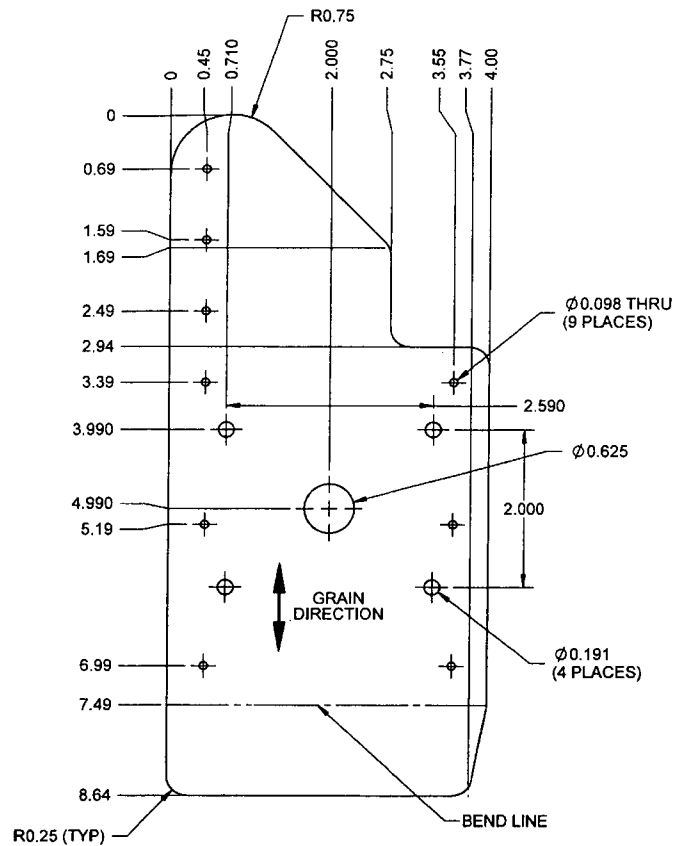
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

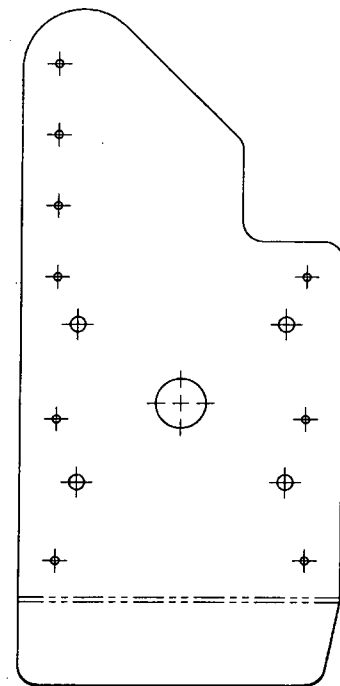
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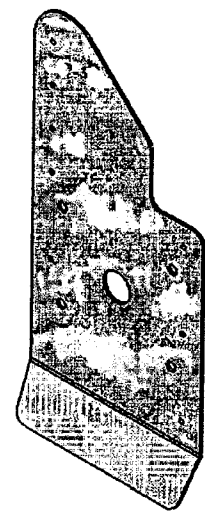
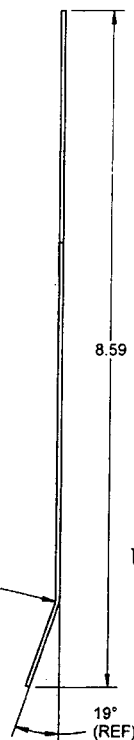
8 7 6 5 4 3 2 1



**D3639-1F FLAT PATTERN**  
**(D3639-2F OPPOSITE)**



**D3639-1 DOUBLER**  
**(WAS GENEVA P/N G10604-3)**  
**D3639-2 OPPOSITE**  
**(WAS GENEVA P/N G10604-6)**



SHOP COPY  
RETURN TO  
ENGINEERING  
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SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 04388 MLW  
12/05/11

**RELEASED**  
07-07-11

- NOTES:**
- 1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.050 THICK PER QQ-A-250/4 OR AMS 4037 (REF DART SPEC M2024T3S.050)
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3639-1/-2" USING FINE POINT PERMANENT INK MARKER
  - 7) WEIGHT: 0.14 lbs

A		NEW ISSUE; REPLACES G10604		LE	07.07.27
REV.		DESCRIPTION		BY	DATE
DESIGN	TS	<b>DART AEROSPACE USA, INC.</b> PORT HADLOCK, WA			
DRAWN	LE				
CHECKED	LE	DRAWING NO.	D3639	REV	A
MFG. APPR.	LE	SHEET 1 OF 2			
APPROVED	LE	TITLE	DOUBLER	SCALE	2:3
DE APPR.	LE	COPYRIGHT © 2007 BY DART AEROSPACE USA, INC.			
DATE		07.07.27		THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

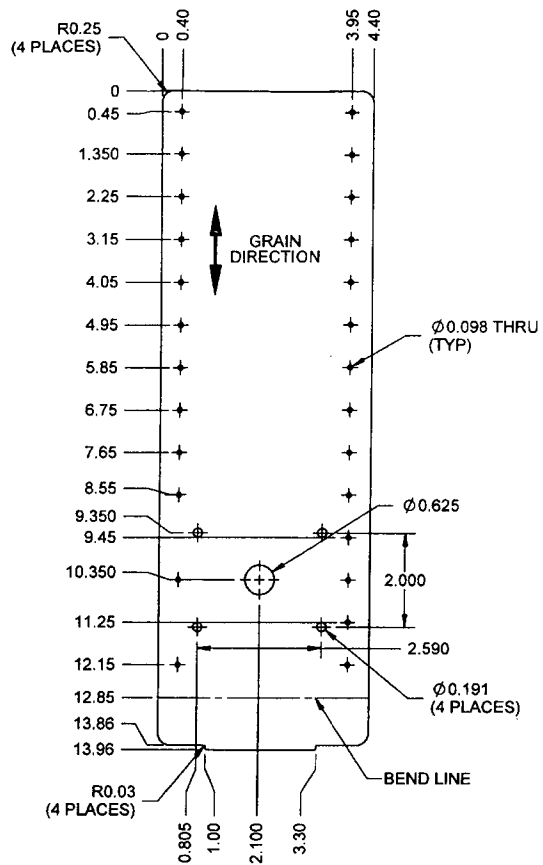
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

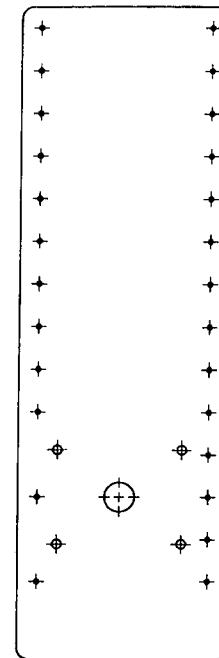
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

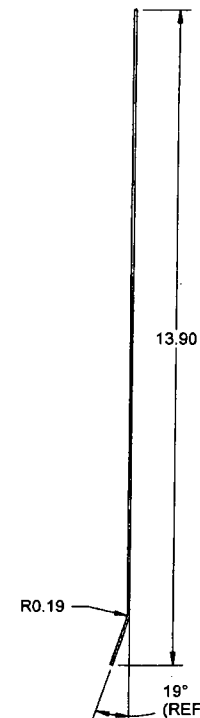
**NOTE:** Date & initial all entries



**D3639-3F FLAT PATTERN**  
**(D3639-4F OPPOSITE)**



**D3639-3 DOUBLER**  
**(WAS GENEVA P/N G10604-4)**  
**D3639-4 OPPOSITE**  
**(WAS GENEVA P/N G10604-5)**



**RELEASED**  
07.09.07

- NOTES:**
- 1) MATERIAL: 2024-T3 ALUMINUM SHEET 0.050 THICK PER QQ-A-250/4 OR AMS 4037 (REF DART SPEC M2024T3S.050)
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3639-3/-4" USING FINE POINT PERMANENT INK MARKER
  - 7) WEIGHT: 0.3 lbs

DESIGN	TS	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	LE	PORT HADLOCK, WA	
CHECKED	BE	DRAWING NO.	REV. A
MFG. APPR.	BE	<b>D3639</b>	SHEET 2 OF 2
APPROVED	BE	TITLE	SCALE
DE APPR.	BE	<b>DOUBLER</b>	2:5
DATE	07.07.27	COPYRIGHT © 2007 BY DART AEROSPACE USA, INC.	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			

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